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MDSO further respectfully submits that expedited action is appropriate. The requested waiver goes to the heart of MDSO's system build-out. The power limitations that apply will determine the number of sites required in each service area, and hence the amount of equipment and the number of transmitter site leases; those factors will in turn determine system design. All the cost savings and speed of deployment that would result from a waiver will be lost if, for example, MVDDS must sign leases for multiple transmitter sites in each DMA based on the assumption of the power limits imposed by the Rules. Consequently, MDSO's deployment of

MVDDS systems is at a stand-still during the pendency of this request; that result is surely contrary to the Commission's intentions for MVDDS spectrum.

III. A Waiver is Appropriate.

In establishing rules for MVDDS, the Commission adopted admittedly conservative technical rules to protect co-primary DBS systems. *See*, *Second R&O* at ¶¶ 26, 71. The Commission anticipated that, due to the new Rules' technical constraints, MVDDS licensees might wish to design systems that exceeded the MVDDS Rules' limitations. *Id.* at ¶ 236. Accordingly, the FCC instructed interested licensees to file a petition for waiver, showing "that the waiver would not cause harmful interference to DBS services." *Id.* at n. 573.

In its many filings before the FCC, MDSA provided the Commission with information concerning its experience in deploying MVDDS equipment outside the United States. These filings all demonstrated that operations at higher EIRP levels would be readily achievable in MVDDS systems without causing harmful interference to co-channel services. *See*, *e.g.*, Recon Opposition at 5-7; Recon Reply at 2-5; April 16th Letter at 4-5.

The Commission has acknowledged that higher power operations in MVDDS spectrum are possible, but to date has taken an abundantly-cautious approach. In declining to grant the MDSA petition to reconsider the EIRP and EPFD limits adopted in the MVDDS docket, at least as applied to rural areas, the Commission did not challenge MDSA's technical arguments, instead pointing to the ability of MVDDS licensees to file petitions for waiver of the power limits. *See*, *Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range; Amendment of the Commission's Rules to Authorize Subsidiary Terrestrial Use of the 12.2-12.7GHz Band by Direct Broadcast Satellite Licensees and Their Affiliates; and*

Applications of Broadwave USA, PDC Broadband Corporation, and Satellite Receivers, Ltd. to Provide a Fixed Service in the 12.2-12.7GHz Band, Fourth Memorandum Opinion and Order, 18 FCC Rcd. 8428, ¶ 88 (2003) ("*Fourth MO&O*"). MDSO submits that the time is now ripe for the Commission to grant a waiver of the EIRP and EPFD restrictions.

A. The Waiver Will Not Cause Harmful Interference to DBS Operations.

As demonstrated by the technical Report attached hereto, higher power operations for MVDDS are eminently feasible in the real world without causing harmful interference. As indicated in the Report, in the test area, there was generally little to no perceptual presence of MVDDS signals at the DBS receivers at EIRPs at or above 30 dBm per 24 MHz of spectrum. *See* Report at 28 -35, and Figures referenced therein. Throughout nearly a month of testing, there was not a single reported interference complaint from any DBS licensee or customers, at any power level. Id. at 35.

The testing procedures used included taking two sets of measurements of DBS reception in each case, one with the MVDDS transmitter on and the other with the MVDDS off, so that the slightest presence or effect of the MVDDS signal could be isolated. *See* id. at 3. The MDS transmitter was operated from a tower at a height of 30 meters AGL, the base of which was 3,239 meters AMSL. Id. at 10. The test configuration chosen was intended to replicate the worst case scenario. Id. at 14. Measurements were taken at thirty-three sites throughout the Albuquerque DMA. Id. at 20-21.

As its affiliate MDSA has long attested, the Report shows that careful system design protects DBS reception as well as or better than blanket prohibitions such as those found in the FCC's Rules. *See* id. at 35. The equipment and techniques pioneered by MDSA permit such careful design, thus allowing the MVDDS provider to operate at higher power levels without

causing harmful interference or any impact that would be perceptible to lawful DBS customers entitled to protection. Even in urban areas, as with Site 3 in central Albuquerque, MVDDS operations with EIRP well in excess of 14 dBm per 24 MHz of spectrum showed no interference to DBS transmissions. *See* id. at 29-31. Moreover, at the highest EIRP level tested, MDSA's mitigation techniques resulted in a 44 dBm per 24 MHz of spectrum MVDDS signal being barely detectible at DBS receivers in this area. Id. at 30.

The test results conform with FCC requirements and warrant a grant of this waiver request. "In the absence of harmful interference to DBS, no cognizable interest of DBS licensees will be undermined." *Second R&O* at ¶ 32. The Commission's Rules "define[] *harmful interference* as '... interference which ... seriously degrades, obstructs, or repeatedly interrupts a radiocommunication service[.]'" *Fourth R&O* at ¶ 23 (emphasis in original). The evidence in the Report indicates that significant power increases above the ceilings imposed by the Commission's Rules are possible before any degradation, obstruction or interruption of DBS service occurs – indeed, often before any detectable MVDDS signal is present at the DBS receiver. Consequently, as demonstrated in the Report, the requested waiver will not adversely affect DBS licensees or their customers.

Moreover, MDSO does *not* seek a waiver of the notification and coordination procedures of Section 101.1440(d)-(e), or the DBS customer complaint provisions of Section 101.1440(g). MDSO will notify DBS licensees and their customer of records prior to the installation of each transmitter, as required by the Rules. Each transmitter will be carefully coordinated for optimum performance in its "real world" environment to ensure that harmful interference to DBS reception does not occur. In each case, DBS customers of record will have notice and remedies.

In the unlikely event that a DBS customer of record experiences harmful interference due to MVDDS operations, MDSO will remain responsible for curing that interference.

B. A Waiver Will Serve the Public Interest.

"One of the Commission's primary statutory obligations, as well as one of its principal public policy objectives, is to facilitate the widespread deployment of facilities-based communications services to all Americans, including those doing business in, residing in, or visiting rural areas." *Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies To Provide Spectrum-Based Services*, 19 FCC Rcd. 19078, ¶ 4 (2004). The Commission has previously noted that MVDDS shows promise for the provision of new video and broadband data services to the public, particularly in rural America. *See, e.g., Second R&O, supra*, at n. 26, ¶ 128. The requested waiver will advance that objective and serve the public interest by allowing MVDDS systems to be built using fewer transmitters operating from fewer sites within each DMA, thus substantially reducing the cost of deploying MVDDS systems.

The cost savings are likely to be particularly beneficial to rural areas – lower leasing, construction, utility and other expenditures that will result from installing fewer transmitters, enabling rapid deployment of service to low population density areas, where it might otherwise be too costly to deploy services. Indeed, if high-power operation is authorized, MDSO plans that most of its initial transmitter sites will be located in rural areas. As MDSA previously observed, high-power build-out in rural areas would allow for MVDDS installation on taller towers serving wider areas, not only improving the economic feasibility of deploying MVDDS in sparsely-populated regions, but also decreasing the likelihood of interference to DBS reception by enabling more advanced interference mitigation techniques. *See*, Rural Spectrum Comments at

6-7. By allowing higher-powered operations, the Commission would mitigate the usual incentives to build first in urban areas, leaving the rural areas to be filled in later if at all. Rather, under the requested waiver, economies would favor early build-out in rural areas, where a single transmitter could serve multiple communities.

MDSO holds licenses for some 80 DMAs throughout the United States, many of which contain rural areas which are currently unserved or underserved. Under the requested waiver, because those rural areas would be the location of the first MVDDS transmitters in any DMA, MDSO's proposal would result in those areas receiving service concurrently with, or perhaps in advance of, urban areas in the same DMA. MDSO's proposal is therefore likely to provide the greatest benefit to consumers in areas that are not already served by cable or other broadband providers, or who have a very small field of competing broadband providers from which to choose.

Conclusion

WHEREFORE, the foregoing premises considered, MDSO respectfully requests that the Commission expeditiously grant the waiver requested herein, and modify its MVDDS licensees in accordance with that waiver. If there are any questions about this request, kindly contact MDSO's undersigned attorneys.

Respectfully submitted,

MDS OPERATIONS, INC.

By: _____

Frederick M. Joyce
Christine McLaughlin

Its Attorneys

VENABLE LLP
575 7th Street, N.W.
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Tel.: (202) 344-4653

DATE: May 7, 2007 (original)
August 29, 2007 (corrected)

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
MDS OPERATIONS, INC.	)	File No. _____
	)	
Petition for Waiver to Increase Effective	)	
Isotropic Radiated Power Limitations	)	EXPEDITED ACTION
Applicable to Multichannel Video Distribution	)	REQUESTED
and Data Service Stations WQAR560, *et al.*	)	

To: Chief, Wireless Telecommunications Bureau

SUPPLEMENT TO PETITION FOR RULE WAIVER

Frederick M. Joyce
Christine McLaughlin
Attorneys for MDS Operations, Inc.

VENABLE LLP
575 7th Street, N.W.
Washington, DC 20004
Tel.: (202) 344-4653

August 29, 2007

SUMMARY

MDSO supplements its Petition for Rule Waiver to correct or clarify certain statements in the Petition, and to provide additional legal support for the propriety of granting a waiver in this case.

It is appropriate for the Bureau to proceed by waiver rather than rule-making in this instance. In adopting MVDDS technical rules, the Commission itself stated that requests to operate at variance from those rules should be submitted in the form of a waiver petition. Moreover, MDSO's Petition expresses no opinion on other equipment or techniques that may be used by other MVDDS licensees. It seeks only authority to operate the specific types of equipment tested by it, using its tested system design techniques, at power levels greater than those permitted by the rules but lower than the maximum power levels used in testing. As MDSO's tests demonstrated, its operations at the power levels requested in the Petition will not cause interference to DBS. MDSO will not only comply with the notice requirements of the Commission's rules, but also will undertake further outreach efforts to ensure that DBS customers have a toll-free number at which to contact MDSO. In the unlikely event that interference from MDSO's operations were to occur to a DBS subscriber, MDSO would take steps to cure it.

The Commission has previously proceeded by waiver to permit the rapid introduction of new or advanced services. In at least one instance, the Commission granted a waiver permitting an entirely new service to be instituted on frequencies allocated to a different, existing service. MDSO's Petition proposes nothing so extraordinary; it seeks to provide the types of services for which the MVDDS frequencies were allocated, but requires the waiver of certain technical rules

to utilize techniques that will make those services available to the public more expeditiously, efficiently and cost-effectively than would otherwise be the case.

Moreover, the Commission has often imposed less restrictive or onerous regulations on licensees serving rural or smaller markets. None of MDSO's licenses authorizes service in any of the 30 largest DMAs, and most of its markets are considerably smaller. MDSO's system design is particularly suited for the rapid deployment of service in sparsely-populated areas remote from the population center of the DMA.

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To: Chief, Wireless Telecommunications Bureau

PETITION FOR RULE WAIVER

Frederick M. Joyce
Christine McLaughlin
Attorneys to MDS Operations, Inc.

VENABLE LLP
575 7th Street, N.W.
Washington, DC 20004
Tel.: (202) 344-4653

May 7, 2007

SUMMARY

MDS Operations, Inc. ("MDSO") respectfully requests a waiver of the provision of the Commission's Rules which restrict power levels of Multichannel Video and Data Distribution Service ("MVDDS") transmitters.

Tests conducted by MDSO under its recent experimental license grant demonstrate that MVDDS transmitters can readily be operated at higher power levels than those permitted by the Commission's Rules, without causing harmful interference to any party. In particular, as the attached Report analyzing the field tests demonstrates, MVDDS stations can be operated at significantly higher power without any noticeable impact on Direct Broadcast Satellite ("DBS") reception. Moreover, MDSO does not seek a waiver of the MVDDS-DBS coordination requirements; those requirements and MDSO's system design guarantee that each site will be carefully engineered to avoid harmful interference.

In adopting extremely conservative power limits for MVDDS, the Commission anticipated that MVDDS licensees might require a waiver of those constraints; this Petition requests such a waiver. In addition to the lack of harm to any interested party, the requested power increases will have affirmative public interest benefits. Higher power operations will reduce the number of transmitters required, thus permitting more economical and efficient deployment of MDSO's systems, which will expedite the provision of services to the public. Moreover, because MDSO's system design contemplates placing those higher-powered transmitters at high elevations in rural areas so as to cover wider areas with a single transmitter, the nearby rural communities will be among the first to receive new video and data services.

The requested waiver will further the Commission's goal of rapidly deploying new broadband services the public, especially in rural or underserved communities. MDSO respectfully submits that the requested waiver should be expeditiously granted.

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To: Chief, Wireless Telecommunications Bureau

PETITION FOR RULE WAIVER

MDS Operations, Inc. ("MDSO"), by its attorneys and pursuant to Section 1.925 of the Commission's Rules, 47 C.F.R. ¶ 1.925, hereby requests a permanent waiver of Rule Section 101.105(a)(4) of the Commission's Rules, which imposes equivalent power flux density ("EPFD") limitations on the Multichannel Video Distribution and Data Service ("MVDDS"); Rule Section 101.147(p), which limits Effective Isotropic Radiated Power ("EIRP") for MVDDS stations to 14 dBm per 24 MHz of spectrum; and those portions of Rule Section 101.1440 (including without limitation subsections (a)-(c)) which would prohibit operations in excess of the EPFD specified in Section 101.105(a)(4).

MDSO respectfully requests that it be granted a waiver of those Rule provisions and such other of the MVDDS technical Rules, applicable to all of its MVDDS licenses identified in the foregoing FCC Form 601 application.[1] This request would permit MDSO to operate its

[1] MDSO is filing an FCC Form 601 application for modification of each of its approximately 80 MVDDS licenses. This Petition, along with the Report (which is broken into separate files), is being uploaded to each such application in the Universal Licensing System ("ULS").

per 24 mHz

transmitters at EIRP levels of up to 40 dBm[2] from any transmitter site in its licensed service areas, with the actual power level at each such transmitter to be determined on a site-by-site basis. MDSO requests that the waiver be applicable throughout each of the affected Designated Market Areas ("DMAs"), without regard to whether a particular DMA, or the portion thereof served by a transmitter, would be defined as "urban" or "rural." This waiver should be granted based on the system design created by MDSO's sister company, MDS America, Inc. ("MDSA"), which, as shown herein, allows for higher EIRP without causing any harmful interference. MDSO warrants to use only MDSA-designed and built systems in all areas subject to the waiver. Operations under the waiver would be subject to prior coordination with Direct Broadcast Satellite ("DBS") and non-geostationary orbit fixed satellite service ("NGSO FSS") operations in accordance with Section 101.1440(d)-(e) and 101.103(f), respectively; and subject to protection of MVDDS licensees in adjoining DMAs or incumbent public safety licensees in accordance with Section 101.1421.

In support hereof, the following is respectfully shown:

I. Background.

MDSO is the holder of eighty (80) MVDDS licenses, obtained in Auction Nos. 53 and 63. Its affiliate MDSA is in the business of designing and manufacturing wireless equipment and infrastructure. MDSA is the U.S. licensee of MDS International S.A.R.L., which has deployed numerous MVDDS systems outside of the United States.

MDSA has been a leading proponent in the U.S. of the creation of MVDDS. *See e.g.*, Comments of MDS America on Further Notice of Proposed Rule Making in ET Docket No. 98-

[2] *Cf.*, Exhibit One at 30-31, 33. The highest power level referenced in the attached technical documentation was 44 dBm, at which level perceptible, although not always strongly so and not necessarily interfering, MVDDS signals were present at the receivers being tested. Out of an abundance of caution, MDSO is proposing a ceiling considerably below that level.

206 (filed March 12, 2001)[3]; Reply Comments of MDS America, Further Notice of Proposed Rule Making in ET Docket No. 98-206 (filed April 5, 2001)[4]; MDS America Opposition to Various Petitions for Reconsideration, ET Docket No. 98-206 (filed April 24, 2001) ("Recon Opposition")[5]; Reply of MDS America, Inc. to Oppositions to Petition for Reconsideration, ET Docket No. 98-206 (filed Sept. 13, 2002) ("Recon Reply")[6]; Letter to Marlene H. Dortch from Nancy Killian Spooner, Ex Parte Presentation in ET Docket No. 98-206 (filed April 16, 2003) (the "April 16th Letter")[7]; Letter to William F. Caton from Nancy Killian Spooner, Ex Parte Presentation in ET Docket No. 98-206 (filed March 13, 2002) (the "March 13 Letter")[8]. In addition to the MVDDS rulemaking proceedings, MDSA also participated in the Commission's dockets concerning the facilitation of wireless services in rural areas, promoting the deployment of high-power MVDDS in rural communities. Comments of MDS America in WT Docket No. 02-382 (filed Oct. 15, 2002) ("Rural Spectrum Comments").[9]

Under an experimental license grant first issued in May of 2001, MDSA conducted studies to demonstrate to the Commission the ability to operate in MVDDS spectrum without harmful interference to other users of the subject spectrum bands. *See*, Call Sign WC2XPU (File Nos. 0095-EX-PL-2001; 0005-EX-ML-2002; 0074-EX-RR-2003).

In 2006, MDSA was granted a second experimental authorization, under Call Sign WC9XKW, to further test the operation of MVDDS stations at power levels higher than those that would normally be permitted by Section 101.105(a)(4) of the Rules, and the impact, if any,

[3] Available at http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6512562118, *et seq.*
[4] Available at http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6512564295.
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[9] Available at http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6515383239.

on Direct Broadcast Satellite ("DBS") operations. *See*, File Nos. 0738-EX-ST-2005; 0548-EX-ST-2006.

MDSA retained Dr. Bahman Badipour and his company, Analytic Consulting Services ("ACS"), to conduct testing of high-powered MVDDS operations and their "real world" impact under Call Sign WC9XKW. Dr. Badipour is one of the world's leading experts on MVDDS technology. From September 14, 2006 through October 9, 2006, ACS conducted field tests in the Albuquerque, NM DMA. Those field tests studied the effects of MVDDS transmissions of varying power levels on the receipt of DTV signals, using DTV receive equipment of the kind in use by Albuquerque customers; three different types of receive antennae were used.

The results of those field tests are described in the ACS "Albuquerque MVDDS Test Report," completed on January 9, 2007 (the "Report"), a copy of which is attached hereto as Exhibit One. The tests demonstrated that relatively high power operations resulted in little difference in the detection of MVDDS signals at the DBS receivers, and, detection of MVDDS signals did not correlate to actual harmful interference. Although MDSA had provided the DBS providers with FCC-required formal notice well in advance of the actual field tests, and had even given public notice of its activities in local media, MDSA did not received a single complaint from any DBS provider or customer at any time during the testing process. *See* Report at 36.

II. Standard For Review; Propriety of Expedited Action.

A waiver of the Commission's Rules is appropriate where, inter alia, "[t]he underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest[.]" *See* 47 C.F.R. § 1.925(b)(3). The grant of the requested waiver of the MVDDS technical rules is justified.

The underlying purpose of the MVDDS power limitations, which is to protect DBS receivers from harmful interference and degradation of service without "unduly constraining the deployment of MVDDS[,]" will be furthered by a grant of the requested waiver. *See, e.g., Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range; Amendment of the Commission's Rules to Authorize Subsidiary Terrestrial Use of the 12.2-12.7GHz Band by Direct Broadcast Satellite Licensees and Their Affiliates; and Applications of Broadwave USA, PDC Broadband Corporation, and Satellite Receivers, Ltd. to Provide A Fixed Service in the 12.2-12.7GHz Band*, Memorandum Opinion and Order and Second Report and Order, 17 FCC Rcd 9614, ¶¶ 68-69 (2002) ("*Second R&O*"). The Commission specifically chose "very conservative technical parameters" in establishing those limitations. Id. at ¶ 71. The stringent power limitations imposed by the Commission do work to constrain the deployment of MVDDS, by requiring significant MVDDS licensees to build out more transmitters due to the low-power operation of each, the Commission's Rules significantly increase the costs of MVDDS deployment. Conversely, as demonstrated in the Report, a well-designed MVDDS system can operate at more than three times the maximum EIRP generally permitted by the Rules without negative impact on DBS reception. Therefore, the requested waiver would not undermine any of the interests served by the Rules, and indeed, will further the Commission's goal of allowing for the rapid, flexible deployment of MVDDS services.

Furthermore, a grant of the requested waiver will serve the public interest. In creating MVDDS, the Commission envisioned that this service would "deliver competition to other video distribution and data services and offer localized service that may not be possible through other services." *See, Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of*

NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range, First Report and Order and Further Notice of Proposed Rule Making, 16 FCC Rcd 4096, ¶ 237 (2000). A grant of the proposed waiver would permit MDSO to more rapidly complete the deployment of its systems, thereby allowing it to become a cost-effective, efficient competitor to incumbent video and broadband services in those of its service areas where cable or other incumbents currently operate, or to provide the first such services in more remote or less populous communities where they do not. The additional costs and additional construction time to deploy MVDDS services in the absence of a waiver will impact prospective customers by delaying services and requiring higher subscription fees; and, the denial would require MDSO and other operators to concentrate first on more populated areas in its DMAs in order to institute viable systems, with the attendant delays to rural areas. The rapid of new services, especially to rural areas, is among the Commission's primary policy goals, and the requested waiver will advance that goal, in furtherance of the public interest.

MDSO further respectfully submits that expedited action is appropriate. The requested waiver goes to the heart of MDSO's system build-out. The power limitations that apply will determine the number of sites required in each service area, and hence the amount of equipment and the number of transmitter site leases; those factors will in turn determine system design. All the cost savings and speed of deployment that would result from a waiver will be lost if, for example, MVDDS must sign leases for multiple transmitter sites in each DMA based on the assumption of the power limits imposed by the Rules. Consequently, MDSO's deployment of MVDDS systems is at a stand-still during the pendency of this request; that result is surely contrary to the Commission's intentions for MVDDS spectrum.

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operations with EIRP well in excess of 14 dBm showed no interference to DBS transmissions. *See* id. at 29-31. Moreover, at the highest EIRP level tested, MDSA's mitigation techniques resulted in a 44 dBm MVDDS signal being barely detectible at DBS receivers in this area. Id. at 30.

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Moreover, MDSO does *not* seek a waiver of the notification and coordination procedures of Section 101.1440(d)-(e), or the DBS customer complaint provisions of Section 101.1440(g). MDSO will notify DBS licensees and their customer of records prior to the installation of each transmitter, as required by the Rules. Each transmitter will be carefully coordinated for optimum performance in its "real world" environment to ensure that harmful interference to DBS reception does not occur. In each case, DBS customers of record will have notice and remedies. In the unlikely event that a DBS customer of record experiences harmful interference due to MVDDS operations, MDSO will remain responsible for curing that interference.

B. A Waiver Will Serve the Public Interest.

"One of the Commission's primary statutory obligations, as well as one of its principal public policy objectives, is to facilitate the widespread deployment of facilities-based communications services to all Americans, including those doing business in, residing in, or visiting rural areas." *Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies To Provide Spectrum-Based Services*, 19 FCC Rcd. 19078, ¶ 4 (2004). The Commission has previously noted that MVDDS shows promise for the provision of new video and broadband data services to the public, particularly in rural America. *See, e.g., Second R&O, supra*, at n. 26, ¶ 128. The requested waiver will advance that objective and serve the public interest by allowing MVDDS systems to be built using fewer transmitters operating from fewer sites within each DMA, thus substantially reducing the cost of deploying MVDDS systems.

The cost savings are likely to be particularly beneficial to rural areas – lower leasing, construction, utility and other expenditures that will result from installing fewer transmitters, enabling rapid deployment of service to low population density areas, where it might otherwise be too costly to deploy services. Indeed, if high-power operation is authorized, MDSO plans that most of its initial transmitter sites will be located in rural areas. As MDSA previously observed, high-power build-out in rural areas would allow for MVDDS installation on taller towers serving wider areas, not only improving the economic feasibility of deploying MVDDS in sparsely-populated regions, but also decreasing the likelihood of interference to DBS reception by enabling more advanced interference mitigation techniques. *See*, Rural Spectrum Comments at 6-7. By allowing higher-powered operations, the Commission would mitigate the usual incentives to build first in urban areas, leaving the rural areas to be filled in later if at all. Rather,

under the requested waiver, economies would favor early build-out in rural areas, where a single transmitter could serve multiple communities.

MDSO holds licenses for some 80 DMAs throughout the United States, many of which contain rural areas which are currently unserved or underserved. Under the requested waiver, because those rural areas would be the location of the first MVDDS transmitters in any DMA, MDSO's proposal would result in those areas receiving service concurrently with, or perhaps in advance of, urban areas in the same DMA. MDSO's proposal is therefore likely to provide the greatest benefit to consumers in areas that are not already served by cable or other broadband providers, or who have a very small field of competing broadband providers from which to choose.

Conclusion

WHEREFORE, the foregoing premises considered, MDSO respectfully requests that the Commission expeditiously grant the waiver requested herein, and modify its MVDDS licensees in accordance with that waiver. If there are any questions about this request, kindly contact MDSO's undersigned attorneys.

Respectfully submitted,
MDS OPERATIONS, INC.

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